

ACC NR: AP7001991

SOURCE CODE: UR/0040/66/030/006/0977/0992

AUTHOR: Chernous'ko, F. L. (Moscow)

ORG: none

TITLE: On the motion of a body having a cavity partially filled with viscous liquid

SOURCE: Prikladnaya matematika i mehanika, v. 30, no. 6, 1966, 977-992

TOPIC TAGS: motion equation, body liquid system, liquid oscillation, body liquid system dynamics

ABSTRACT: The motion of a solid body having a cavity partially filled with a viscous incompressible liquid having a free surface is analyzed under the assumption that the oscillation of the body with respect to its mass center and the motion of liquid in the body are small (linear formulation). The viscosity of the liquid is also assumed to be small. General form equations of the dynamics of the body-liquid system for an arbitrary form of the cavity are derived. The analysis of the motion of the body-liquid system is reduced to the asymptotic solution of the equations of motion of a liquid (hydrodynamic equations). The solutions are sought by the boundary layer method, taking the solutions of the problem of oscillation of a body having a cavity partially filled with an ideal liquid as their initial approximations. General expressions for approximate solutions are derived and a system of linear integro-differential equations for determining their coefficients is presented. It is pointed out that the study

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ACC NR: AP7001991

of motion of a liquid can be reduced to the solution of the Cauchy problem for the derived system of equations when the motion of a body is known. The obtained solutions of the hydrodynamic equations are used to simplify equations of the dynamics of the body-liquid system. The parameters of these equations characterizing the motion of the body-liquid system are established and analyzed. It is pointed out that these parameters must be taken as initial conditions in analyzing the motion of the body-liquid system. Some particular cases of the general problem are also investigated. Orig. art. has: 1 figure and 62 formulas. [LK]

SUB CODE: 20 / SUBM DATE: 03Jun66 / ORIG REF: 016 / ATD PRESS: 5110

Card 2/2

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1

CHERNOUSIKO, L., insh.

Atomic ship in the Arctic regions. NTO 2 no.8;31-33 Ag '60.
(MIRA 13:10)
(Lenin (Atomic ship))

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

CHERNOUS'KO, L., inzhener-kapitan 1-go ranga

"Antimissile missile" by M.N. Nikolaev. Reviewed by L. Chernous'ko.
Starsh.-serzh. no.8:38 Ag '61. (MIRA 14:10)

(Antimissile missiles)
(Nikolaev, M.N.)

CHERNOUS KO, L.

O 25

PHASE I BOOK EXPLOITATION

SOV/6261

Kernenergie und Flotte; Artikelsammlung (Nuclear Energy and the Navy; Collection of Articles) [Berlin] Deutscher Militärverlag [1961]. 232 p. Errata slip inserted. 2000 copies printed.

Translation from the Russian of: Atomnaya energiya i flot.

Translator: Erika Steuk, Lieutenant Commander. Responsibility for German edition: Claus Gruszka, Engineer; Ed.: Klaus Krumsieg.

PURPOSE: This collection of articles is intended for officers of the army, coast guard, and merchant marines.

COVERAGE: The book, a translation from the Russian, contains 25 articles dealing with the application of nuclear weapons to naval combat operations. Chapters 19 and 25 have been supplemented with additional data for this edition. The devastating features of nuclear explosions are discussed. Attention is also given to the protection of personnel, ships, and coastal facilities against nuclear weapons, and to the present and future applications of nuclear power plants to shipping. No personalities are mentioned. There are 16 references: 10 Russian (including 3 translations from English-language sources), 1 French, 1 German, 1 English, 1 American, and 2 either English or American.

Nuclear Energy and the Navy (Cont.)

SOV/6261

25. L. Chernous'ko, Engineer, Captain (Navy). The Ice-Breaker
Lenin 216

AVAILABLE: Library of Congress

SUBJECT: Nuclear Engineering

Card 6/6
2/2

AD/jsj/svb
3-13-63

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A CHERNOUSKO, L
PHASE I BOOK EXPLOITATION

see chapter author

A JUN 25 1963

SOV/6261

Kernenergie und Flotte; Artikelsammlung (Nuclear Energy and the Navy; Collection of Articles) [Berlin]. Deutscher Militärverlag [1961]. 232 p. Errata slip inserted. 2000 copies printed.

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COVERAGE: The book, a translation from the Russian, contains 25 articles dealing with the application of nuclear weapons to naval combat operations. Chapters 19 and 25 have been supplemented with additional data for this edition. The devastating features of nuclear explosions are discussed. Attention is also given to the protection of personnel, ships, and coastal facilities against nuclear weapons, and to the present and future applications of nuclear

Card 1/8

3

26

Nuclear Energy and the Navy (Cont.)

SOV/6261

power plants to shipping. No personalities are mentioned. There are 16 references: 10 Russian (including 3 translations from English-language sources), 1 French, 1 German, 1 English, 1 American, and 2 either English or American.

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3

Nuclear Energy and the Navy (Cont.)

SOV/6261

25. L. Chernous'ko, Engineer, Captain (Navy). The Ice-Breaker
Lenin

216

AVAILABLE: Library of Congress

SUBJECT: Nuclear Engineering

Card 6/8
3

AD/jsj/svb
3-13-63

CHERNOUSKO, L., inzh. kap. I rang

Columbuses of the 20th century. Nauka i tekhnika mladezhi 14 no.7:3-5, 30
Jl '62.

1. Deistv. chlen na Geografskoto druzhestvo na SSSR.

CHERNOUS'KO, L.D., inshener-kapitan 2 ranga; KADER, Ya.M., redaktor;
LEVINSKAYA, N.Z., tekhnicheskiy redaktor

[Atomic explosions at sea; a collection of articles] Atomnyi vzryv
na more; sbornik statei. Moskva, Voen.izd-vo M-va obor. SSSR,
1955. 102 p.
(Atomic bomb)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1

CHERNOUS'KO, L., inszh.-kapitan 1 ranga.

Atomic submarine. Voen. znan. 34 no. 8:14-15 Ag '58.

(MIRA 11:12)

(United States--Atomic submarines)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

CHERNOUS'KOY

21(2) FILE I BOOK INFORMATION 807/2705

Akademika Chernous'koia 1 (first abnormak edition (Atomic Energy and the SovET Collection of Articles) Moscow, Fornisdat, 1959. 322 p. (Series: Meshch-Polyarnaya Biblioteka) Number of copies printed not given.

M. I. N. M. Dukert, Prof. M. A. M. Gavrillova, Ed. and Compiler; L. B. Chernous'koia, Navigator, Captain.

PURPOSE: This book is intended for the general reader.

CONTENTS: The papers in this collection discuss in popular style, and on the basis of data published in the Soviet and American press, problems of the use of atomic energy and atomic weapons in combat operations at sea. The collection also contains reports on the development, history of, and future prospects of nuclear energy's use in ships and in naval vessels. A number of articles are devoted to the antinuclear defense of ships and to their objects, and to the introduction of nuclear power plants in naval vessels. Also included in the collection are papers dealing with the future prospects for several uses of nuclear energy, and with the construction of the world's first atomic submarine, the "Komsomol", which is expected to play an important part in the further development of the Arctic region. The collection also contains papers published in the Journal "Naukay Soty" in 1951 - 1958, in revised and supplemented form.

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 cording to Data From the Foreign Press) 217
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 ship, Paris 225

AVAILABLE: Library of Congress (0767.C39)

CHERNOUS'KO, L. inzh.-kapitan I rang.

Atomic ice-breaking vessel "Lenin" is a creation of Soviet
science and technology. NTO no.2:58-61 F '59. (MIRA 12:2)
(Atomic ships) (Ice-breaking vessels)

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~~CHERNOUS'KO, L., inzh.~~

~~Ships which are faster than the wind. NTO 2 no.10:29-33 0 '60.
(MIRA 13:10)~~
~~(Ground-effect machines)~~

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CIA-RDP86-00513R000308530001-1

CHERNOUS'KO, L., inzh.-kapitan 1 ranga

The ship continues the fight.. Voenznan. 36 no.11:18-20 N°60.
(MIRA 13:11)
(Warships)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

CHERNOUS'KO, L., inzhener-kapitan pervogo ranga

Exploration of the deep sea ("Conquest of the deep sea" by
M.N. Diomidov, A.N. Dmitriev. Reviewed by L. Chernous'ko).

Tekh. mol. 28 no. 3:39 '60. (MIRA 14:4)
(Oceanographic research) (Diomidov, M.N.) (Dmitriev, A.N.)

CHERNOUS'KO, L., inzhener-kapitan 1 ranga.

Flagship breaks ice fields. Znan. sila 36 no. 4:12-13 Ap '61.
(MIRA 14:4)
(Lenin (Atomic ship))

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1

CHERNOUS 'KO, L., inzhaner-kapitan 1-go ranga

With attacks from land and sea. Tekh. i vooruzh. no.4:12-13
Ap '64. (MIRA 17:9)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

CHERNOUSOV, A.N.

A cutter holder for making slit grooves in blind holes. Stan. i
instr. 26 no. 8; 24-25 Ag '55. (MIRA 8:12)
(Machinists' tools)

CHERNOUSOV, A.N.

Sets of taps with equal mean dimensions are needed. Mashinostroitel'
no. 4:39 Ap '61. (MIRA 14:4)
(Taps and dies)

CHERNOUSOV, A.N.

Some changes in the design of taps. Stan.i instr. 33 no.6:34
Je '62. (MIRA 15:7)
(Taps and dies)

CHERNOUSOV, A.N.

Some constructional changes of taps. Ratsionalizatsiya 13 no.1:
27-28 '63.

CHERNOUSOV, I.M., mayor meditsinskoy sluzhby

Prevention of dysentery. Voen.-med.zhur. no.4:84 Ap '60.
(MIRA 14:1)
(DYSENTERY)

CHERNOUSOV, I.M.

Laying a main communication cable in mountainous areas. Transp.
stroi. 15 no.1:9-11 Ja '65. (MIRA 18:3)

1. Rukovoditel' brigady Sibirskogo gosudarstvennogo proyektno-
izyskatel'skogo instituta Gosudarstvennogo proizvodstvennogo
komiteta po transportnomu stroitel'stvu SSSR.

DORDZHIYEV, B.S.; KIRBASOVA, M.B.; MUSHANOV, S.P.; MANZHIKOVA, R.M.;
CHERNOUSOV, I.P.; KIYEVSKAYA, V.I.; DZHELACHINOV, E.B., red.
GAYDASH, Ya., tekhn. red.

[Economy of the Kalmyk A.S.S.R.; statistical collection] Narodnoe
khoziaistvo Kalmytskoi ASSR; statisticheskii sbornik. Elista,
Kalmytskoe knizhnoe izd-vo, 1960. 107 p. (MIRA 14:8)

1. Kalmuck A.S.S.R. Statisticheskoye upravleniye. 2. Kollektiv
rabotnikov Statisticheskogo upravleniya Kalmytskoy ASSR (for all
except Gaydash). 3. Nachal'nik Statisticheskogo upravleniya Kal-
mytskoy ASSR (for Dzhelachinov)
(Kalmyk A.S.S.R.—Statistics)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1

NOVIKOV, I.I.; CHERNOUSOV, K.T.

Mechanical properties of aluminum-tin alloys in solid-liquid states. Trudy Inst. iad. fiz. AN Kazakh. SSR 2:109-111 '59.
(MIRA 13:3)
(Aluminum-tin alloys)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

CHERNOV, L.A., inshener.

Electric traction in single-phase current of industrial frequency. Elektri-
chestvo no.12:82-83 D '53. (MIRA 6:11)

1. Sektsiya po nauchnoy razrabotke problem transporta OTN Akademii nauk SSSR.
(Electric railroads)
Section for scientific working out of problems of transportation AS USSR
(Electric railways Trans. Publ. AS USSR)

CHERNOUSOV, L. A.

AID P - 1473

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 24/36

Author : Chernousov, L. A., Eng.

Title : Experimental motor coach with mercury arc rectifiers
(Review of Foreign Periodicals)

Periodical : Elektrichestvo, 2, 71-72, F 1955

Abstract : The author presents a description of a trial electrification of the Lancaster-Morecambe-Heysham line of the London Midland Region of British Railways. The line was converted to the 50-cycle single-phase a-c system from the original 25-cycles. The description is based on 4 British and 1 French references (1953-1954). 2 diagrams

Institution: None

Submitted : No date

TEREKHOV, A.A.; kand. tekhn. nauk; KHLEBNIKOV, V.N., kand. tekhn. nauk;
CHERNOUSOV, L.A., inzh.

Electrification of French railroad sections using single-phase commercial current. Zhel. dor. transp. 37 no.8:76-81 Ag '55.
(MIRA 12:8)

1. Institut kompleksnykh transportnykh problem AN SSSR.
(France--Railroads--Electrification)

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308530001-1

CHERNOUSOV, L. A.

KHLEBNIKOV, V.N., kandidat tekhnicheskikh nauk; CHERNOUSOV, L.A., inzhener.

Motorcar rolling stock using a.c. industrial current.Zhel.dor.
transp. 39 no.4:77-82 Ap '57. (MLRA 10:5)
(Railroad motorcars)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308530001-1"

CHERNOUSOV, L.A.

Use of condensers for increasing the power coefficient of an a.c.
traction system. Elek.zhel.dor. no.3;89-102 '61. (MIRA 14:7)
(Electric capacitors) (Electric railroads--Current supply)

METELKIN, Boris Aleksandrovich, kand. tekhn. nauk; CHEKHOVSKY,
Leonid Alekseyevich, inzh.; KORSHUROV, Vladimir Aleksandrovich,
inzh. Prinimal uchastiye FAL'KOM, V.E., inzh.; AYBASHEVA, T.V.,
red.

[Increasing the economic efficiency of electric traction
systems with rectifier-type locomotives] Povysheni' effektiv-
nosti ustroistv elektricheskoi tiagi s vypriamitel'nymi elek-
trovozami. Moskva, Transport, 1965. 175 p. (MIRA 18:1)

1. Institut kompleksnykh transportnykh problem Gosplana SSSR
(for all except Aybasheva).

CHERNOUSOV, M.

Fertilizers and Manures

Preparation and use of manures. Kolkh. proizv., 12, No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.
2

CHERNOUSOV, M.

This year 41, next year 00 centners! The VLKJS 30 gadi Collective Farm in the district of Karsava in the fight for fulfillment of obligations.

p. 5 (Padomju Latvijas Kolchoznieki) Vol. 9, No. 8, Aug. 1957, Riga, Latvia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS(EEAI) LC, VOL. 7, NO. 1, JAN. 1958

DAVIDENKO, K.; KOROLEV, S.; CHERNOUSOV, M.; ZHUKOV, M., red.;
AYZUPIJTE, M. [Aizupiete, M.], tekhn.red.

[Flax, the northern silk; from the experience of the "Krasnyi
Oktiabr'" Collective Farm, Preyli District] Len - severnyi
shelk; iz opyta kolkhoza "Krasnyi Oktiabr'", Preil'skogo
raiona. Riga, Latviiskoe gos. izd-vo, 1960. 72 p.

(MIRA 14:12)

(Preyli District--Flax)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1

CHERNOUSOV, N.A. (g.Zheleznovodsk)

An excursion to a glass plant. Khim. v shkole 12 no.2:68-71 Mr-
Ap '57. (MLRA 10:3)
(Glass manufacture) (School excursions)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

L 5295-66 EWT(1)/EWA(j)/EWA(b)-2 JK
ACC NR: AP5025009

SOURCE CODE: UR/0286/65/000/016/0068/0069

AUTHORS: Belozerov, B. A.; Gorokhov, N. Ya.; Cherncusov, N. I.; Yakovlev, V. I.

ORG: none

TITLE: A device for aerogenic immunization of people and farm animals by dry powdered vaccines. Class 30, No. 173892

33

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 68-69

TOPIC TAGS: vaccine, immunization

ABSTRACT: This Author Certificate presents a device for aerogenic immunization of people and farm animals by dry powdered vaccines. The device contains a doser, a centrifugal rotary fan, and a remote control panel (see Fig. 1). To increase the accuracy and uniformity of dosing the amounts of the discharged dry vaccine, the device is provided with an immobile dosing disk and two rotary sector blades.

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UDC: 614.47-7:576.8.093.2

09010514

L 5295-66

ACC NR: AP5025009

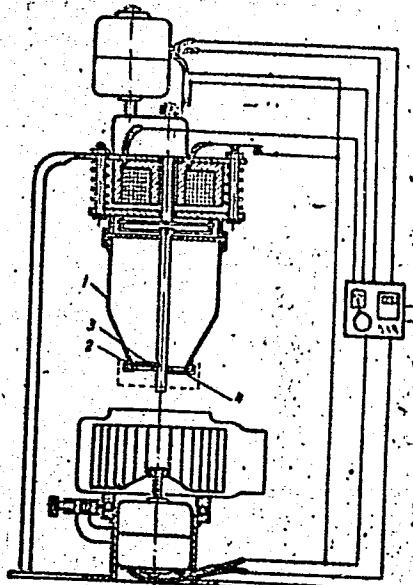


Fig. 1. 1- container;
2- immobile dosing
disk; 3 and 4- rotary
sector blades

Orig. art. has: 1 figure.

SUB CODE: LS/ SUBM DATE: 19Apr62/ ORIG REF: 000/

OTH REF: 000

Card 2/2 DC

CHERNOUSOV, N. P.

VISHNEVSKIY, Nikolay Yevgen'yevich; GLUKHANOV, Nikolay Parmenovich;
KOVALEV, Ivan Sidorovich; STOLYAROV, V.I., retsenzent; MERKIN,
G.I., kandidat tekhnicheskikh nauk, redaktor; CHERNOUSOV, N.P.,
inzhener, redaktor; GOFMAN, Ye.K., redaktor izdatel'stva;
SOKOLOVA, L.V., tekhnicheskiy redaktor

[High pressure apparatus with hermetically sealed electric motors]
Apparatura vysokogo davleniya s ekranirovannym elektrodvigatelem.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956.
178 p.

(Electric motors) (Machinery industry)

(MIRA 9:8)

CHERNOUSOV, N.P.

Centrifugal exhaust fans for aggressive media. Khim.prom.no.6:369-370
S '56. (MLRA 10:2)

1. Nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya,
Leningradskiy filial.
(Fans, Mechanical) (Vinyl compounds)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1

CHERNOUSOV, N.P.

Hermetically-sealed rotary blower for argon. Biul.tekh.-ekon.inform. no.2:
13-15 '59. (MIRA 12:3)
(Blowers) (Argon)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

SHEVCHUSOV, N.P., inzh.

New designs for airtight industrial chemical apparatus. Khit-mash.
no. 11-18 Ja '59. (KIRA 12:7)
(Chemical engineering--Equipment and supplies)

23148
S/184/61/000/002/003/008
A110/A033

26.2/23

AUTHOR: Chernousov, N. P., Engineer

TITLE: Some problems on the theory of hydrostatic radial bearings

PERIODICAL: Khimicheskoye Mashinostroyeniye, no. 2, 1961, 17 - 22

TEXT: The purpose of the investigation of four chamber hydrostatic bearings was the theoretical determination of pressure fluid consumption, capacity and the selection of geometrical dimensions of bearings operating at various conditions. These are characterized by the relative eccentricity

$$\epsilon = \frac{e}{\delta}$$

e - absolute eccentricity in cm; $\delta = \frac{D - d}{2}$ - radial clearance between bush and shaft, in cm. The calculation and designing methods will be discussed in a later paper. Solutions obtained in respect to a four-chamber bearing can be adjusted to apply to any number of chambers (minimum z = 3). The investigation was initiated in view of the increased use of hermetical chemical machinery in which the conventional type of bearings, requiring special lubricants, cannot be used. Hy-
Card 1/10

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23148S/184/61/000/002/003/008
A110/A033

Some problem on the theory of

drostatic bearings operate at all shaft velocities (even at zero) with a negligible friction coefficient and are suitable for low-viscosity liquids. The lack of reliable theoretical data had hitherto delayed their utilization in industry. The three main fluid supply systems are shown in Figure 1. Results of investigations described in this article were based on system I. At eccentricity $e = 0$ the fluid pressure is equal in all chambers and consequently, the load capacity is $F = 0$. As the load capacity of hydrostatic bearings depends on the fluid pressure and shaft revolutions, any variations should be determined experimentally considering the correction coefficient

$$K_F = \frac{F_n \neq 0}{F_n = 0} > 1$$

Full load capacity and full fluid consumption are determined by functions:

$$F_f = f(p_j; \varepsilon; \mu; n; G)$$

$$Q_f = f_1(p_{ch}; \varepsilon; \mu; n; G)$$

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Some problems on the theory of ...

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p_1 - initial pressure in kg/cm^2 ; p_{ch} - chamber pressure in kg/m^2 ; n - number of revolutions per minute; G - geometric dimensions (l_1 ; l_0 ; l ; d ; l_{ch} ; l_{ch} in cm), determining the design of bearings. The fluid consumption at $n = 0$ is:

$$Q = Q_1 + Q_2 + Q_3 + Q_4$$

Q_1 , Q_2 , Q_3 , Q_4 - fluid consumptions in cm^3/sec . Based on the qualitative analysis of the fluid entering through metering orifices the consumption equations in the integral form are

$$Q_1 = 2q_{10} + q_{12} + q_{14} + 2 (q_{a12} + q_{a14}). \quad (2)$$

In view of the turbulent flow the fluid consumption is expressed by

$$Q_1 = \sqrt{\frac{(p_{in} - p_1) 2g f_{ch}^2}{\lambda \gamma}} \quad (8)$$

f_{ch} - free section area of the metering bush in cm; γ - specific gravity of the liquid in g/cm^3 ; λ - full resistance coefficient determined experimentally

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23148

Some problems on the theory of

S/184/61/000/002/003/008
A110/A033

considering the effect of d_{ch} and l_{ch} , and the special design features of hydrostatic bearings. Substituting the unknown pressure coefficients by letters, this system of equations can be generally presented as

$$\sqrt{\frac{p_{in} - p_i}{A}} = B_i p_i - C_i p_{i+1} - D_i p_{i-1} \quad (10)$$

The load capacity of hydrostatic bearings is expressed by

$$F = F_0 + 2F_1 + 2F_a \quad (11)$$

F_0 - load capacity in kg, in the chamber section of b_0 and l_0 size; F_1 - load capacity in kg, in cylindric and section of length l_1 and width b_0 ; F - load capacity in the region of longitudinal partitions of width a and length $l = l_0 + 2l_1$. The investigation of the resulting effect of hydrostatic pressure in one chamber of a four-chamber hydrostatic bearing (supply system I), enables the individual presentation of the load capacity in each chamber by the following method; if the angle between the pressure vector of one chamber and the line of eccentricity is

Card 4/0

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S/184/61/000/002/003/008
A110/A033

Some problems on the theory of

$$\varphi = 0 + \frac{\beta}{2}$$

the load capacity of chamber 1 will be

$$F_0(1) = 2 \int_0^{\frac{\beta}{2}} p_{c1} l_1 \cdot \frac{d}{2} \cos \varphi d\varphi \quad (12)$$

which combined with its analogous equality for chamber 3 yields

$$F_0 = (p_1 - p_3) l_0 d \int_0^{\frac{\beta}{2}} \cos \varphi d\varphi \quad (13)$$

In this specific case (supply system I) the sum of the load pressure components perpendicular to eccentricity or (chambers 2 and 4) parallel to it, is zero. In cases of arbitrary loading this is not the case and the fact should be taken into account when load capacity is determined. The load capacity of the cylindric sec-

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23148

S/184/61/000/002/003/008
A110/A033

Some problems on the theory of

tion l_1 of chamber 1 can be expressed by

$$F_{1(1)} = 2 \int_0^{\frac{\pi}{2}} p_{ol} l_1 \cdot \frac{d}{2} \cos \varphi d\varphi \quad (14)$$

which, together with its analogous equality for chamber 3 produces

$$F_1 = \frac{p_1 - p_3}{2} l_1 d \int_0^{\frac{\pi}{2}} \cos \varphi d\varphi \quad (15)$$

The load capacity F_a of partitions along $l_0 + 2l_1$ is equal to the sum of load capacity values $F_{a12} + F_{a34}$ of diametrically opposite partitions. Figure 5 shows the theoretical pressure diagram of two adjacent chambers. The determination of pressure p_{x12} in the axial section of partition a_{12} provides the load capacity equation for a_{12} , expressed by

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231148

Some problems on the theory of

S/184/61/000/002/003/008
A110/A033

$$F_{a12} = \int_{\frac{B}{2}}^{\frac{B+a}{2}} \left[p_1 - \frac{p_1 - p_2}{a} \left(\varphi - \frac{B}{2} \right) \right] (l_0 + l_1) \frac{d}{2} \cos \varphi d\varphi \quad (16)$$

The general formula on load capacity in respect of supply system III (arbitrary load) is derived by denoting the variable pressure in the investigated cross section areas by p_φ , so that it has the following form:

$$F = \frac{d}{2} (l_0 + l_1) \sum \int_{\varphi_1}^{\varphi_2} p_\varphi \cos \varphi d\varphi \quad (18)$$

Calculations based on this formula require the individual determination of integration limits and pressure values separately for each item. The method of determination is shown in Table 1. The general equation system in respect to pressure can be expressed in the dimensionless form:

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23148

S/184/61/000/002/003/008

A110/A033

Some problems on the theory of ...

$$\sqrt{\frac{1 - p_i}{A_0}} = K_i p_i - L_i p_{i+1} - M_i p_{i-1}$$

In addition to these, the Vychislitel'nyy tsentr leningradskogo otdeleniya Matematicheskogo instituta im. Steklova AN SSSR (Computation Center of the Leningrad Branch of the Institute of Mathematics im. Steklov AS USSR) obtained the corresponding numerical values for various factors. There are 7 figures, 1 table and 11 references; 7 Soviet-bloc and 4 non-Soviet-bloc. The reference to the English language publication reads as follows: A. A. Raimondi and J. Boid, Lubric. Eng., no. 13, 1957.

Card 8/10

GUSEV, Nikolay Nikolayevich; CHERNOUSOV, N.P., red.; FREGER, D.P.,
red. izd-va; GWIRTS, V.L., tekhn. red.

[Use of a rotating magnetic field for the rotor drive in the
cleaning grinding, and polishing of internal pipe surfaces
made of nonmagnetic materials] Primenenie vrashchayushchegosia
magnitnogo polia dlia privoda instrumenta pri ochistke, shli-
fovani i polirovani vnutrennei poverkhnosti trub iz nemag-
nitnykh materialov. Leningrad, 1962. 13 p. (Leningradskii
dom nauchno-tehnicheskoi propagandy. Obmen peredovym opyтом
Serija: Elektricheskie metody, obrabotki materialov, no.6)
(MIRA 15:12)

(Grinding and polishing)

(Magnetic fields--Industrial applications)

CHERNOUSOV, Nikolay Petrovich; POSTERNYAK, Ye.F., inzh., red.;
FREGER, D.P., red.izd-va; BELOGUROVA, I.A., tekhn. red.

[Hydrostatic bearings] Gidrostaticeskie podshipniki;
stenogramma lektsii. Leningrad, 1963. 47 p. (MIRA 16:10)
(Bearings (Machinery))

CHERNOUSOV, N.P., insh.

Terminology in the domain of airtight chemical industrial machinery
and equipment (discussion). Khim.mashinostr. no.5:42-43 S-0
'63. (MIRA 16:10)

CHERNOUSOV, N.P.; KUTIN, A.N.; FEDOROV, V.F.; KOZULIN, N.A.,
doktor tekhn. nauk, prof., retsenzent

[Air-tight chemical and technological machinery and ap-
paratus] Germeticheskie khimiko-tekhnologicheskie ma-
shiny i apparaty. Moskva, Mashinostroenie, 1965. 351 p.
(MIRA 18:7)

ABRAMOV, S.P., kand.geol.-mineral.nauk; CHERNOUSOV, S.I., geolog

Physical properties of Pleistocene clay sediments in the middle
Ob' Valley. Trudy NIIZHT no.28:31-44 '62. (MIRA 16:11)

CHERNOUSOV, S.I., assistant

Mechanical properties of Pleistocene clay rocks in the middle Ob' Valley. Trudy NIIZHT no.2845-51. '62. (MIRA 16:11)

CHERNOUSOV, S.I., assistant

Physicomechanical properties of the loess of the Voronovskiy Yar
on the Ob' River and some considerations regarding its formation.
Trudy NIIZHT no.34:287-297 '63. (MIRA 17:3)

ABRAMOV, S.P.; SUKHORUKOVA, S.S.; CHERNOUSOV, S.I.

Lithological characteristics and physical properties of Oligocene
and Miocene argillaceous sediments in the middle Ob' Valley.
Trudy Inst. geol. i geofiz. Sib. otd. AN SSSR no. 24:50-66 '64.
(MIRA 18:1)

AERAMOV, S.P., kand. geologo-miner, nauk; CHERNOUSOV, S.I., geolog

Study of the eutectic argillaceous soils of the West Siberian
Plain from the view point of engineering geology. Trudy
NIZHT no. 22:61-66 '61
(MIRA 19:1)

ACC NR: AP6021771

SOURCE CODE: UR/0413/66/000/012/0030/0031

INVENTOR: Chernousov, V. A.; Grigor'yev, V. G.; Karpov, N. Ya.

ORG: None

TITLE: Diaphragm assembly for a gasdynamic shock unit. Class 12, No. 182691

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 30-31

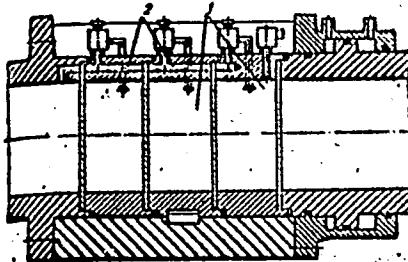
TOPIC TAGS: shock wave, gas dynamics

ABSTRACT: This Author's Certificate introduces a diaphragm assembly for a gasdynamic shock unit. The installation consists of a housing divided by diaphragms into several compartments which are interconnected by pipelines with cutoff valves. The assembly is simplified by communication between the compartments through channels built into the housing.

Card 1/2

UDC: 66.02;62.553,6

ACC NR: AP6021771



1---compartments; 2---channels

SUB CODE: 20, 14/ SUBM DATE: 30Jul65

Card 2/2

CHERNOUSOV, V.D.

Nature of oil pool in the sands of the Aleksino b'd in the Arlan
oil field. Geol nefti i gaza 8 no.12:37-38 D '62

(MIRA 18:2)

1. Neftepromyslovoye upravleniye Arlanneft'.

CHERNOUSOV, V.D.

Formation of the structure of the Arlan oil field. Geol. nafti
i gaza 7 no.8:42-445 Ag '63. (MIRA 16:10)

1. Neftepromyslovoye upravleniye Arlanneft'.

CHERNOUSOV, V.D.

Compilation of maps of true thicknesses in the appraisal of oil
and gas reserves based on the operations in the Arlan field. Geol.
nefti i gaza 9 no.4:34-37 Ap '65.

(MIRA 18:8)

1. Neftepromyslovoye upravleniye Arlanneft'.

CHERNOUSOV, V.D.; BUTKO, V.I.; OGOREL'TSEV, A.I.

Improvement of the ~~drilling~~ in of beds in the Arlan oil
field. Neft. khoz. no. 199-41 P 165. (MIRA 18:4)

Pj-3/PK-4/P1-4/Pao-4 MB

ACCESSION NR AP6002896

AUTHOR Stepanov, V. S.

TITLE Investigation of harmonic effects
of the electron beam size

GENRE Scientific article - elektronika

TOPIC Beam, magnetic wave,

ABSTRACT In this paper, the problem of the influence of the beam size on the excitation of the magnetic wave by the beam current is considered. It is shown that the magnetic wave can be excited in the beam channel in the case of a small beam size. This is due to the fact that the beam current density is high in this case. The magnetic wave can be excited in the beam channel in the case of a small beam size. This is due to the fact that the beam current density is high in this case.

Comments:

Z-1084-65

ACQUISITION NO. AFS-12818

way right) and the a sighting-body point. The latter two are principally points of reference for the glare points. In addition, the third species indicates the start of a glare point. The echo signal distance is measured from the first point to the end of the second. The angle between the first and second points is also measured.

ACQUISITION NO. AFS-12818

SIGHTING POINTS
REFLECTION POINTS

L 5123-66 EWT(1)/T/FCS(k) WR
ACCESSION NR: AP5020122

UR/0109/65/010/008/1445/1452
621.396.671.2.095

AUTHOR: Chernousov, V. S.

TITLE: Nonstationary radiation of antenna systems

SOURCE: Radiotekhnika i elektronika, v. 10, no. 8, 1965, 1445-1452

TOPIC TAGS: antenna radiation

ABSTRACT: The Huygens electrodynamic principle is applied to vector non-harmonic fields and is used to obtain a general solution of the problem of radiation by an arbitrary antenna system excited by a signal of arbitrary shape. Integral formulas for the electric and magnetic vectors \bar{E} and \bar{H} of the antenna field at a remote spot are developed. These general formulas are applied to a simple but practically important case of the nonstationary radiation from a rectangular flat cophasal surface. The design formulas developed for the latter case show that: (1) The field within the major lobe differs in shape from the

Card 1/2

090/0701

L 5123-66

ACCESSION NR: AP5020122

antenna-feed signal only by the amplitude and the phase factor $\pi/2$; (2) As the antenna directivity varies in time, the radiation field does not vanish at any angle; (3) The phase characteristic of the directional pattern is continuously dependent on the angle θ (not in π -steps as it does under harmonic conditions). Orig. art. has: 3 figures and 34 formulas.

ASSOCIATION: none

SUBMITTED: 03Jan64

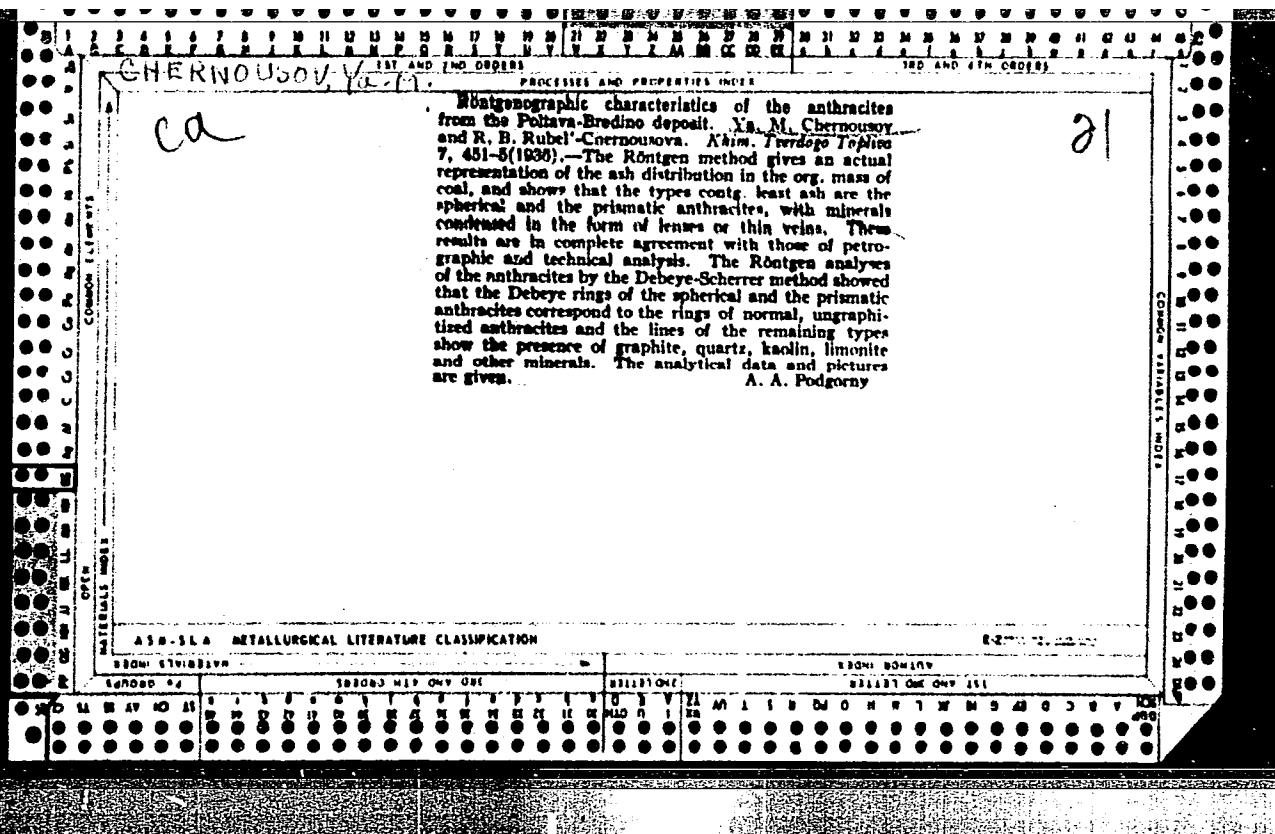
ENCL: 00

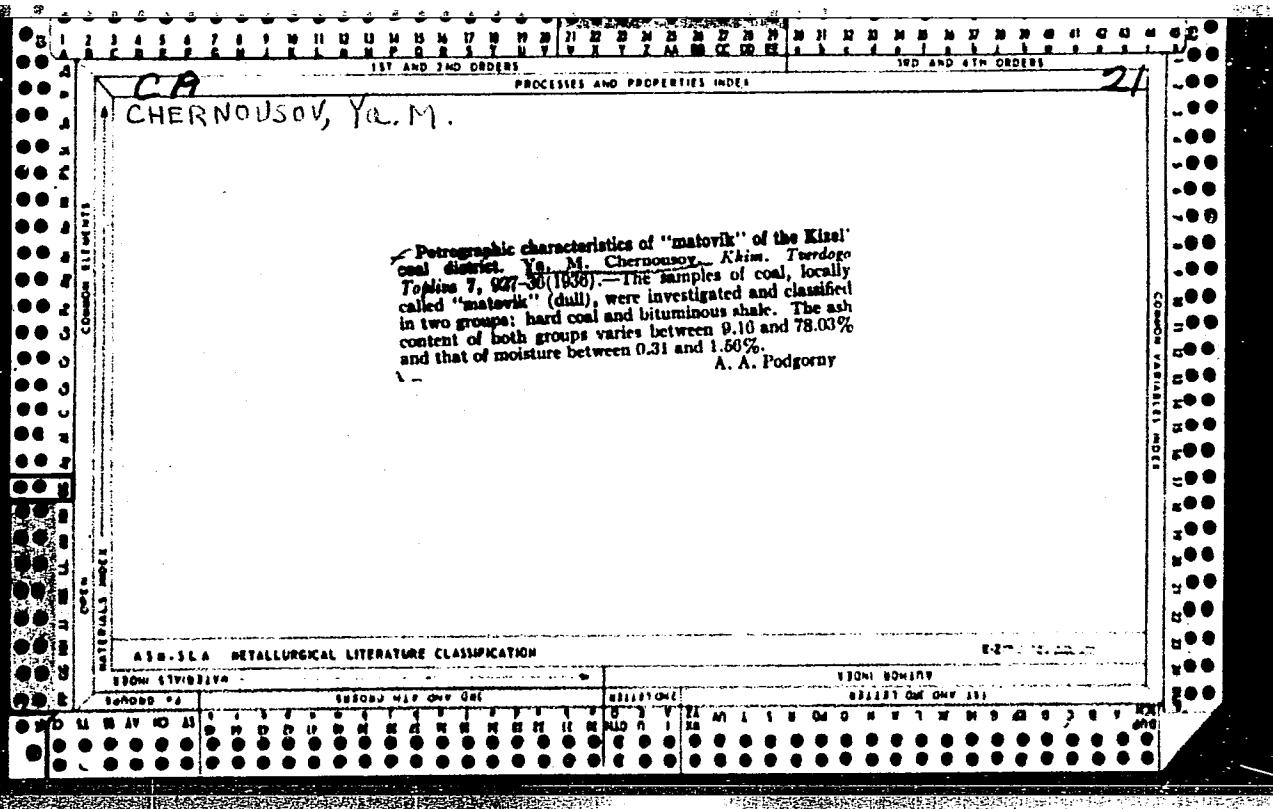
SUB CODE: EC

NO REF SOV: 002

OTHER: 001

OC
Card 2/2





CHERNOUSOV, YA. M.

PA 61T55

USSR/Geology

Feb 1948

Geological Prospecting
Coal

"The Basic Directions of Geological Prospecting for
Coal in Sverdlovsk Oblast," Ya. M. Chernousov, Candi-
date Geol.-Mineralo Sci, Sverdlovsk, 2 pp

"Ugol'" No 2 (263)

Four main tasks set before geological survey person-
nel: 1) location of anthracite coal beds; 2) location
of chunk coal deposits; 3) location of rock coal de-
posits; and 4) location of lignite coal beds, similar
to those in Bogoslovskiy, Veselov, and Volchansk. It
is noted that search for anthracite will be at depths
of 750 meters in Egorshinskiy coal beds.

61T55

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1

CHERNOUSOV, Ya. M.: "Structural-genetic laws of the Mesozoic coal deposits on the eastern slope of the central and northern Urals". Leningrad, 1955. Min Higher education USSR. Leningrad Order of Lenin and Order of Labor Red Banner Mining Inst. (Dissertations for the Degree of Doctor of Geological-Mineralogical Sciences.)
So: Knizhnaya letopis', No. 49, 3 December 1955, Moscow.

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1

CHERNOUSOV, Ya.M.

Tectonic phenomena in peat bogs. Trudy Sver.gor.inst.no.26:20-
24 '56. (Peat bogs) (MLRA 10:3)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

Name: CHERNOUSOV, Yakov Mikhaylovich

Dissertation: Structural-Genetic Regularity of the Mesozoic
Coal Deposits in the Eastern Slope of the Central
and Northern Urals

Degree: Doc Geological-Mineralogical Sci

Affiliation: Sverdlovsk Mining Inst imeni Vakhrushev

Defense Date, Place: 6 Feb 56, Council of Leningrad Order of Lenin
and Order of Labor Red Banner Mining Inst

Certification Date: 15 Sep 56

Source: BMVO 6/57

MALAKHOV, Anatoliy Alekseyevich; IVANOV, S.N., prof., retsenzent;
POKROVSKAYA, I.M., prof., retsenzent; ~~CHERNOUSOV, Ya.M.~~
doktor geologo-mineral.nauk, retsenzent; ARTYUSHINA, V., red.:
[Stone documents] Kamennye dokumenty. Sverdlovskoe knizhnoe
izd-vo, 1957. 178 p.
(Geology) (MIRA 12:1)

21(7) PLATE I BOOK EXPOSITION 807/2956 Akademicheskii zhurnal. Institut gornozemel'noi ekspertizy <u>Genetika tverdikh gorivnykh iskopaemykh (Genesis of Solid Fuels)</u> Moscow, AN SSSR, 1959. 358 p. Errata page inserted. 2,000 copies printed. Sponsoring Agency: Vsesoyuznyi vostochnosibirs'kiy gospochetstvo, str. A. D. T. Mendeleyev. Head Eds.: N. M. Karanov, Corresponding Member, USSR Academy of Sciences, and N. G. Titov, Doctor of Chemical Sciences, 120, of Publishing House: A. L. Bankreiser, Tech. Eds.: Z. P. Kuz'mina. <u>PURPOSE:</u> This collection of papers on the genesis of solid mineral fuels and other specialties interested in the genesis of solid mineral fuels, <u>CONTENTS:</u> The collection of papers on the genesis of solid mineral fuels has been prepared for presentation at the 2nd All-Union Conference on the subjects. The formation of humic substances and peat from the decomposition of microorganisms and plants is discussed in connection with studies on the origin of brown coal and brown coal, and on the role of certain mineral components in the coal- forming processes. The chemical composition of peat and the organic mass of coal, etc., analyzed and shown in a number of tables. Various types of shale are analyzed as are the brown coals of the Donets'kobezh'ye district. Metacarbozma and carbonization of coal found in different parts of the Urals and the Uralian SSR are also discussed. The transformation of peat to articles into combustible materials is analyzed. References accompany individual articles. <u>Editorial Board:</u> N. Z. Genetika of Sibirskii Nauchno-Issledovatel'skii OIL Institute <u>Frontispece:</u> A. S. On the Question of the Origin of Baltic Kakhovite Shale <u>Editor:</u> N. M. and I. A. Vilkman. Legend and Initial Stages of Coal Formation 77 <u>Author:</u> T. F. Origin of Brown Coal Found in the Dognoprotvorsk Basin of the Urals 80 <u>Chernousov, N. N.</u> Irregular Carbonization of Mesozoic Coal Found in the Eastern Flank of the Central and Northern Urals 106 <u>Bogolyubova, I. I.</u> Petrographic and Chemical Characteristics of Some Types of Coal-Fire Volcanic and Belpolom'ye Deposits 122 <u>Klyuchnikov, V. V.</u> Conditions of Formation of Shalyshy Carbonaceous Coal from Southern Urals Brown Coal From Bogolyubova and Klyuchnikov 137 <u>Kuz'min, V. A.</u> Metamorphism of Brown Coal From Bogolyubova and Klyuchnikov Deposits of the Eastern Flank of the Northern Urals 150 <u>Bludov, A. I.</u> Geologic Conditions of Transformation of Coal Reserves in the Northeastern Part of the Russian Platform 156 <u>Orlovs'kii, N. Yu.</u> Some Possible Conditions Under Which Coal Genesis Could Have Been Formed at the Kemerovo Basin 162 <u>Zaprometov, D. T.</u> Evolution of Hard Coal During Metamorphism 169 <u>El'strenko, L. Ye.</u> Changes in Microscopic Characteristics of Coaliferous Coal of the Donbas During Metamorphism 175 <u>Kalinichenko, V. V.</u> Genesis of Jurassic Coal at Tura 198 <u>Gorbik, Z. V.</u> Organic Sulfur in Coal 202 <u>Kazachkin, V. I.</u> Some General Physical and Chemical Questions Com- paring the Coal-Forming Process 204 <u>Novik, M. I.</u> Characteristic of the Process of Transformation of Plant Matter Into Present Coalifiable Materials and the Connection of These Characteristics With the Principal Properties of Coaliferous Materials 207 <u>Antropov, I. I.</u> Petrographic Features of the Coal Substances as Ascertained by Paleogeographic Findings 208 <u>El'strenko, V. I.</u> Chemical Nature of the Baltic Organic Mass of Marsh and River Coal and Changes During Metamorphism 209 <u>Rubareiko, T. A.</u> Changes in the Structure and Properties of Marsh and River Coal During the Coal-Forming Processes 210 <u>Titov, N. G.</u> Role of Mineral Elements in the Coal-Forming Process 219 <u>Kalinichenko, V. V., A. I. Mihailov, and A. Z. Jurovsky.</u> Genesis of Organic Sulfurous Compounds Contained in Coal 233 <u>Editor:</u> Z. V. 244	
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"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1

CHERNOUSOV, Ya.M.

Using structural and genetic analysis for studying the Mesozoic
coal accumulation on the eastern slope of the Central and Northern
Urals. Trudy Gor.geol.inst.UFAN SSSR no.6:69-79 '60.

(Ural Mountains—Coal geology)

(MIRA 14:10)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308530001-1"

CHERNOUSOV, Ya.M., prof.: KNYAZEV, V.A., dotsent;
ANFIMOV, L.V., assistent

Synonymy of coal seams in the Makhnevo deposit. Izv. vys. ucheb.
zav.; gor. zhur. no. 4;3-8 '61. (MIRA 14:6)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva.
Rekomendovana kafedroy geologii mestorozhdeniy goryuchikh
poleznykh iskopayemykh Sverdlovskogo gornogo instituta.
(Makhnevo region--Coal geology)

CHERNOUSOV, Yakov Mikhaylovich; VASIL'YEV, P.V., red.; IZRAILEVA, G.A.,
red. izd-va; GUROVA, O.A., tekhn. red.

[Course in the general geology of coal deposits] Kurs obshchei
geologii ugol'nykh mestorozhdenii. Moskva, Gosgeoltekzdat,
1962. 294 p.
(Coal geology) (MIRA 16:1)

CHERNOUSOV, Yakov Mikhaylovich, prof.; doktor geol.-miner. nauk;
MALAKHOV, A.A., prof., doktor geol.-miner. nauk, retsenzent;
KOLOSNITSYN, V., red.; GOLOBOKOVA, L., tekhn. red.

[Academician A.P.Karpinskii] Akademik A.P.Karpinskii. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1962. 105 p.

(Karpinskii, Aleksandr Petrovich, 1846-1936) ^(MTBA 16:7)

CHERNOUSOV, Ya.M.

Basic characteristics of the tectonics of Mesozoic coal deposits
in the eastern and middle slope of the Central and Northern Urals.
Trudy Sver. gor. inst. no.43:12-20 '63. (MIRA 18:7)

ANFIMOV, L.V.; KNYAZEV, V.A.; CHERNOVSKY, Ya.M.

Coal manifestation in the littoral sediments of the Makhnev
deposit in the eastern slope of the Urals. Trudy Sver. gor.
Inst. no.43:71-74 '63.
(MERA 18:7)

ANFIMOV, L.V.; CHERNOUSOV, Ya.M.

Basic stages of Carboniferous coal accumulations in the eastern
slope of the Urals. Trudy Sver. gcr. inst. no 43:160-172. '63.
(MIRA 18:7)

CHERNOUSOV, Ya.M.

Carbonate rocks in continental coal-bearing sediments (eastern slope of the Urals). Trudy Sver. ger. inst. no.43:173-176 '63.
(MHA 13:7)

GRIGORYAN, Norayr Grigor'yevich; POMETUN, Dmitriy Yefimovich; GORBENKO,
Leonid Andreyevich; LOVLYA, Sergey Aleksandrovich; KAPLAN, Berta
L'vovna; CHERNOUSOV, P.K.,--inzh., retsenzent; FERSHINA, Ye.G.,
vedushchiy red.; FEDOTOVA, I.G., tekhn.red.

[Perforating and blasting in wells] Prostrellochnye i vzryvnye
raboty v skvazhinakh. Moskva, Gos.sauchno-tekhn.izd-vo neft.
i gorno-toplivnoi lit-ry, 1959. 353 p. (MIRA 13:3)
(Prospecting) (Blasting)

GRIGOR'YEV, G.P.; VASIL'YEVA, T.M.; SAYAFOVA, L.V.; CHERNOUSOV, Yu.I.

Sorption properties of technical lignins. Zhur. prikl. khim. 36
no.4:764-768 Ap '63.
(MIRA 16:7)

1. Leningradskiy tekhnologicheskiy institut tsnellyuloznobumazhnoy promyshlennosti.

(Lignin) (Sorption)

CHERNOUSOVA, A.V.; PUTYATO, N.G.

Clinical aspects of listerellosis. Zhur.mikrobiol.epid. i immun.
28 no.3:58-60 Mr '57. (MLRA 10:6)

1. Iz 15-y infektsionnoy bol'nitsy Novosibirска.
(LISTERIA, infections,
clin. aspects (Rus))

CHERNOUSOVA, A.V.; KORNILOVA, A.L.; BOGDANOVA, V.D.

Ictero-hemorrhagic leptospirosis in one of the remote districts of
Novosibirsk Province. Zhur. mikrobiol. epid i immun. 31 no.6:126-
128 Je '60. (MIRA 13:8)

1. Iz Novosibirskoy oblastnoy sanitarno-epidemiologicheskoy stantsii
i Nauchno-issledovatel'skoy veterinarnoy stantsii.
(NOVOSIBIRSK PROVINCE—WEIL'S DISEASE)

CHERNOUSOVA, A.V.

Leptospirosis of the *sorex*-type. Zhur. mikrobiol. epid. i immun.
32 no.5:74-76 My '61. (MIRA 14:6)

1. Iz 15-y infektsionnoy bol'nitsy Novosibirska.
(LEPTOSPIROSIS)

CHERNOUSOVA, A.V. (Novosibirsk)

Lesions of the cardiovascular system in leptospirosis. Klin.
med. no.3:50-54 '62. (MIRA 15:3)

1. Iz kafedry gospital'noy terapii (zav. - prof. A.A. Demin)
Novosibirskogo meditsinskogo instituta (dir. - zasluzhennyj
deyatel' nauki prof. G.D. Zalesskiy) i iz 15-y infektsionnoy
bol'nitsy (glavnnyy vrach M.T. Mandych).
(LEPTOSPIROSIS) (CARDIOVASCULAR SYSTEM--DISEASES)

CHERNOUSHOVA, K. I.

PHASE I BOOK EXPLOITATION

sov/5690

Akademiya nauk Kazakhskoy SSR. Institut yadernoy fiziki.

Metallovedeniye i obrabotka metallov davleniyem (Physical Metallurgy and Pressworking of Metals) Alma-Ata, 1961. 183 p. (Series: Trudy Instituta yadernoy fiziki, t. 4) 2,450 copies printed.

Resp. Eds.: I. G. Grinman and A. A. Presnyakov; Resp. Secretary: V. V. Chervyakova
Eds.: M. Ya. Brailovskaya and T. I. Shevchuk; Tech. Ed.: Z. P. Rorokina.

PURPOSE: This book is intended for scientific research workers, technical personnel in industry, and students and aspirants interested in problems of physical metallurgy and the pressworking of metals.

COVERAGE: The book, Volume IV of the Transactions of the Institute of Nuclear Physics, Academy of Sciences Kazakh SSR, contains papers reviewing problems of physical metallurgy. Attention is given to a consideration of metal ductility, strength, phase transformation, and the ordering of various alloys, and to a discussion of the diffusion mechanism of the plasticity. Experimental findings concerning strength, deformation, and external friction in the working of non-ferrous metals and alloys are included in papers dealing with metal rolling.

Card 1/6

Physical Metallurgy and Pressworking of Metals

SOV/5690

Problems of automatic inspection and control of multidraft wire-drawing frames are also considered. Most of the papers are accompanied by references, the majority of which are Soviet.

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Card 2/6

Physical Metallurgy and Pressworking of Metals	SOV/5690
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SOV/137-59-3-5658D

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 100 (USSR)

AUTHOR: Chernousova, K. T.

TITLE: Investigation of the Crack Formation Accompanying the Solidification
of Aluminum Alloys (Issledovaniye treshchinoobrazovaniya pri kristal-
lizatsii aliuminiyevykh splavov)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of
Candidate of Technical Sciences, presented to the Mosk. in-t tsvetn.
met. i zolota (Moscow Institute for Nonferrous Metals and Gold),
Moscow, 1958

ASSOCIATION: Mosk. in-t tsvetn: met. i zolota (Moscow Institute for Nonferrous
Metals and Gold), Moscow

Card 1/1

CHERNOUSHONKA, K.T.

807/28/98

PHASE I. BOOK EXTRADITION

2(0)

Akademika nauchno-tekhnicheskikh trudov/laboratoriya metallovedeniya i rastek metallocer/, tom 2 ("Transactions of the Institute of Nuclear Physics, Kazakh S.S.R. Academy of Sciences /Laboratory for Metallurgical Science and Physics of Metals/", Vol. 2) Alma-Ata, Tselo-Al Kazakhstan SSR, 1959. - 369 p., 1,000 copies printed.

Ed.: Ya. G. Gerasimov; Tech. Ed.: P.P. Afanas'ev; Editorial Board: I.O. M. Grishman, L.I. Danova, T.D. Demyan'kova, D.K. Kal'por (Imp. Ed.), S.A.K. Kal'dash, A.A. Presnyakov, and Z.S. Tschubayev.

PURPOSE: This is a collection of articles intended for research scientists and factory laboratory personnel, engineers, technicians, and also students and applicants in metallurgy and physics of metals.

CONTENTS: The collection contains research reports which investigate the dependence of many of alloy properties on their chemical and phase states in a wide range of temperatures down to melting point and set forth much factual material on theoretical ideas on plasticity and superplasticity of metals and other alloys.

Alloys, copper, nickel, and other elements are described as new, and hypotheses on reasons for the lowered plasticity of solid solutions are provided on the basis of experimental data. No generalities are mentioned. References are given at the end of each article.

Presnyakov, A.A. and V.Y. Borodkin. Study of the Mechanical Properties

of Al-Cu Alloys. Investigation of Some Tin Base

Alloys

Presnyakov, A.A. and Yu.P. Kryuchikov. Plasticity, Phase Crystal Structure and the Properties of Ferrite Metal Alloys

1. Phase crystal structure and properties of alloys of the Cu-Cr system

2. The aging of Cu-Ti and Ni-Cu-Ti bronzes

3. Phase crystal structure and the properties of some Copper-

Presnyakov, A.A. and U.E. Dzhemal'yan. Plasticity of Some Copper-Nickel and Nickel-Alloy During Dynamic Loading

Presnyakov, A.A. and I.M. Saburova. Investigation of Some Tin Base

Alloys

Presnyakov, A.A. and Yu.P. Kryuchikov. Mechanical Properties of Al-Si Alloys

1. The Influence of the Liquid State on the Mechanical Properties of Al-Si Alloys

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3. The Influence of the Solid State on the Mechanical Properties of Al-Si Alloys

Presnyakov, A.A. and I.F. Chernoushona. The Influence of Iron, Silicon and Manganese Additives on the Mechanical Properties of Al-Cu Alloys Near the Solidus Point

Worob'yov, A.Y. and N.L. Savina. The Temperature Coefficient of Electrically Resistant Manganese Alloys

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Presnyakov, A.A., V.Y. Borodin, and I.M. Dzhemal'yan. Determination of Mean Specific Pressure During the Hot Rolling of Alloys and Nonferrous Metals

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